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TITLE : METHOD FOR MEASURING HEMOGLOBIN

ABSTRACT : PURPOSE: To enable the direct and continuous measurement of the fluctuation in the content of hemoglobin (Hb) in blood by an optical technique from a living body by selecting the specific two different wavelengths at which only the change in the absorbancy by Hb is substantially changed in a  $\geq 700\text{nm}$  wavelength region.

CONSTITUTION: The specific two different wavelengths at which only the change in the absorbancy by the Hb is substantially generated in the  $\geq 700\text{nm}$  wavelength region are selected and the light rays of these wavelengths are directly projected to the biotissue. The measurement is then made in accordance with the changes  $\Delta A_1$  and  $\Delta A_2$  in the absorbancy with the respective wavelengths,  $K_1$ ; the absorption coefft. of the oxidation type Hb at the wavelength  $\lambda_1$ ,  $K_1'$ ; the absorption coefft. of the deoxidation type Hb at the wavelength  $\lambda_1$ ,  $K_2$ ; the absorption coefft. of the oxidation type Hb at the wavelength  $\lambda_2$ ,  $K_2'$ ; the absorption coefft. of the deoxidation type Hb at the wavelength  $\lambda_2$ . Namely, the fluctuation in the respective quantities of the oxidation type Hb and the deoxidation type Hb and/or the fluctuation in the total Hb quantity in the optical path for irradiation is directly and continuously measured.

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